



(BW)(AZ-GLOBAL-SOLAR-ENERGY)(UNS) U.S. Solar Firm Hires Veteran Executive

TUCSON, Ariz.--(BUSINESS WIRE)--April 5, 2000--Global Solar Energy, L.L.C, has hired Darrell W. Graddy as vice president of operations. Graddy will oversee manufacturing of Global Solar's innovative solar and electric generation and storage products at the firm's southeast Tucson facility.

Graddy most recently was general manager of Lockheed Martin's Information Support Services division in North Carolina. Previously he held executive positions in production operations, program management, strategic planning and business development for the company.

"Global Solar is extremely fortunate to acquire an experienced executive of Mr. Graddy's caliber," said Dr. Mohan Misra, president of the company.

James S. Pignatelli, chief executive officer and president of UniSource Energy Corp. (NYSE:UNS), which owns 67 percent of Advanced Energy Technologies, full owner of Global Solar, concurs.

"Darrell Graddy adds important depth and leadership to our manufacturing processes," he said. "His skills fully complement our strategic focus on commercialization of consumer-based technologies."

Background information:

From its Tucson production headquarters, Global Solar manufactures a thin-film photovoltaic material that converts sunlight directly into electricity. Unlike traditional solar panels that are heavy, fragile, and rigid, Global Solar's thin-film solar modules are lightweight, durable, and can be incorporated into flexible products.

Global Solar's current production is focused on manufacturing its unique lightweight and flexible solar modules including its foldable Portable Power Pack(TM). Primary clients are the U.S. armed forces and aerospace industries.

Other efforts are focused on fulfilling existing government contracts, supplying PV material to original equipment manufacturers (OEMs) for incorporation into products such as roofing materials, and providing lightweight modules to satisfy traditional residential and commercial applications.

Advanced Energy Technologies also is developing thin-film solid state rechargeable batteries. The batteries are thinner than a human hair, tolerant of wide ranges of operating temperatures, can be recharged thousands of times, and fabricated into many shapes and sizes to meet requirements of specific applications.

These batteries can be utilized as the active power source for microelectronics (implantable medical devices), as standby power for microelectronics (CMOS-SRAM memory devices), and for other applications. Longer term, the firm intends to integrate these batteries with Global Solar's CIS photovoltaic modules to offer fully self-contained and flexible power packs.

UniSource Energy's other affiliates include Tucson Electric Power Co., the second largest investor-owned utility in Arizona; Nations Energy Corp., an investor in independent power projects; ION International, a recently formed energy services consulting company; and Southwest Energy Solutions, a regional energy services company.

The other one-third owner of Global Solar Energy is ITN Energy Systems Inc., a Denver-based, privately held research and technology development company. It specializes in advanced materials sciences, and thin-film intelligent processing to provide innovative solutions to space, energy, and environmental industries.

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